

bead. Next, a thin insulating protective layer 22 (such as glass) is placed over the active area such that a hermetic seal is created using the epoxy. The assembly is then allowed to dry. As can be seen in the plan view of Figure 5, anode lead 23 and a cathode lead 24 are exposed for connection to external circuitry. The result is the thin film batter in accordance with the present invention, which is shown in Figure 5.

### IN THE CLAIMS

Please amend Claim 20 to read as follows:

20. (Amended) A thin-film battery structure comprising:
- a. an adhesion layer of cobalt deposited on a non-metallic substrate;
  - b. a current collector layer of platinum deposited over said adhesion layer, wherein during the formation of said adhesion layer and said collector layer, said substrate is kept stationary;
  - c. a cathode layer sputtered over said adhesion layer and current collector layer, which layer is formed of a thin-film solid state material, wherein during formation of said cathode layer said substrate is rocked back and forth so as to create an ovular area within which the cathode has desired characteristics, including nanocrystalline grains and proper crystallographic orientation on the substrate;
  - d. a lithium based solid state electrolyte layer sputtered from over said cathode layer;
  - e. a lithium based metal anode formed over said electrolyte layer by the use of an appropriate shadow mask;
  - f. an anode lead configured to connect said anode layer to external circuitry;
  - g. a cathode lead configured to connect said cathode layer to external circuitry; and
  - h. a package sealing and protecting said structure.

Please add newly drafted Claims 22-27:

22. (New) A thin-film battery structure comprising:
- a. an adhesion layer formed over a non-metallic substrate;
  - b. a current collector layer formed over said adhesion layer;

c. a cathode layer comprising a thin-film solid state material formed over said collector layer;

d. a lithium-based solid state electrolyte layer formed over said cathode layer;

e. a lithium metal anode formed over said electrolyte layer utilizing an appropriate mask;

f. an anode lead configured to connect said anode layer to external circuitry;

and,

g. a cathode lead configured to connect said cathode layer to external circuitry.

23. (New) The structure of claim 22, said substrate comprising one of glass and silicon.

24. (New) The structure of claim 22, further comprising an amorphous oxide layer formed on said substrate.

25. (New) The structure of claim 22, said adhesion layer comprising cobalt.

26. (New) The structure of claim 22, said current collector comprising platinum.

27. (New) The structure of claim 22, said mask comprising a photoresist base layer.